

GenCore version 4.5  
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OM protein - protein search, using sw model

Run on: January 7, 2002, 16:03:53 ; Search time 180.87 Seconds  
(without alignments)  
37.201 Million cell updates/sec

Title: US-08-569-749-8  
Perfect score: 267  
Sequence: 1 LKAGFYIIPGDRVACFAC.....WEPKNANSEHLRHPKCPF 46

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 473505 seqs, 14627329 residues

Total number of hits satisfying chosen parameters: 473505

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :  
1: SP archaea:\*  
2: SP bacteria:\*  
3: SP fungi:\*  
4: SP human:\*  
5: SP\_invertebrate:\*  
6: SP\_mammal:\*  
7: SP\_mhc:\*  
8: SP\_organelle:\*  
9: SP\_phase:\*  
10: SP\_plant:\*  
11: SP\_rodent:\*  
12: SP\_virus:\*  
13: SP Vertebrate:\*  
14: SP\_unclassified:\*

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	length	DB ID	Description
1	267	100.0	1140	4 Q9UNH1	Q9unh1 homo sapien
2	232	86.9	589	11 Q9QZC6	Q9qzc6 rattus norv
3	232	86.9	589	11 Q9SE88	Q9ses8 rattus norv
4	226	84.6	602	11 Q9SE89	Q9ses9 rattus norv
5	223	83.5	195	13 Q9IA70	Q9ia70 gallus gall
6	223	83.5	197	13 Q9IA69	Q9ia69 gallus gall
7	223	83.5	324	13 Q9DDN2	Q9ddn2 gallus gall
8	223	83.5	610	13 Q9DDN2	Q9ddn2 gallus gall
9	217	81.3	224	11 Q9SE88	Q9ses8 rattus norv
10	175	65.5	496	11 Q9SE88	Q9ses8 rattus norv
11	175	65.5	501	11 Q9SE88	Q9ses8 rattus norv
12	175	65.5	501	11 Q9SE88	Q9ses8 rattus norv
13	141	52.8	587	11 Q9R015	Q9r015 mus musculu
14	133.5	50.0	153	5 Q9YEM2	Q9vem2 drosophila
15	130	48.7	264	12 Q9EN27	Q9en27 drosophila
16	129	48.3	438	5 Q9VUX5	Q9vux5 drosophila
17	126	47.2	377	5 Q9ND07	Q9nd07 spodoptera
18	126	47.2	379	5 Q9U492	Q9u492 trichoplusi
19	124	46.4	281	12 Q9YML6	Q9yml6 choristoneu

20	122.5	45.9	4845	11 Q88738	Q88738 mus musculu
21	121	45.3	261	12 Q9QES9	Q9qes9 epiphyas po
22	121	45.3	280	4 Q9HAP7	Q9hap7 homo sapien
23	121	45.3	298	4 Q9H2A8	Q9h2a8 homo sapien
24	120	44.9	313	12 Q9J827	Q9j827 spodoptera
25	118	44.2	276	12 Q89744	Q89744 buzura supp
26	116	43.4	268	12 Q9E232	Q9e232 helioverpa
27	116	43.4	268	12 Q9IF18	Q9if18 helioverpa
28	112	41.9	208	12 Q55770	Q55770 chilio lride
29	111.5	41.8	4804	5 Q9YH01	Q9yh01 drosophila
30	100	37.5	150	12 Q9YV14	Q9yv14 melanoplus
31	98	36.7	155	12 Q9YV14	Q9yv14 melanoplus
32	95	35.6	292	12 Q9J234	Q9j234 bombyx mori
33	90.5	33.9	142	6 Q9GLN5	Q9gln5 sus scrofa
34	89	33.3	284	12 Q9YK15	Q9yk15 epiphyas po
35	88.5	33.1	142	13 Q9DDK0	Q9ddk0 gallus gall
36	87	32.6	301	12 Q9P254	Q9p254 trichoplusi
37	84	31.5	285	12 Q9PY09	Q9py09 xestia c-ni
38	83	31.1	281	12 Q9DVT5	Q9dvt5 pluteella xy
39	80.5	30.1	187	12 Q9DSW8	Q9dsw8 ascovirus d
40	74.5	27.9	329	12 Q9YVX0	Q9yv10 melanoplus
41	68	25.5	155	5 Q22837	Q22837 caenorhabdl
42	66.5	24.9	137	4 Q9BV24	Q9bv24 homo sapien
43	64	24.0	317	12 Q9J849	Q9j849 spodoptera
44	63	23.6	87	11 Q09119	Q09119 mus musculu
45	60.5	22.7	297	2 Q32477	Q32477 pseudomonas

#### ALIGNMENTS

RESULT 1  
ID Q9UNH1 PRELIMINARY: PRT: 1140 AA.  
AC Q9UNH1  
DT 01-MAY-2000 (TREMBLrel. 13, Created)  
DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)  
DT 01-JUN-2001 (TREMBLrel. 17, Last annotation update)  
DE API2-MLT FUSION PROTEIN.  
GN API2-MLT.  
OS Homo sapiens (Human).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.  
OX NCBI\_Taxid=9606;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE-99272400; PubMed-10339464.  
RA Dieleman J., Baens M., Wlodarska I., Stefanova-Ouzounova M.,  
RA Hernandez J.M., Hossfeld D.K., De Wolf-Peeters C., Hagemeijer A.,  
RA Van den Berghe H., Marynen P.;  
RT \*The apoptosis inhibitor gene API2 and a novel 18q gene, MLT, are  
RT recurrently rearranged in the t(11;18)(q21;q21)pesassociated with  
RT mucosa-associated lymphoid tissue lymphomas.\*;  
RT Blood 93:3601-3609(1999).  
CC -1- SIMILARITY: TO IMMUNOGLOBULIN AND MAJOR HISTOCOMPATIBILITY COMPLEX  
CC DOMAIN: AFD12094; AAD46161.1; -.  
CC EMBL: AFD12094; AAD46161.1; -.  
CC HSSP: Q13490; 10BH.  
DR InterPro: IPR001370; BIR.  
DR InterPro: IPR003576; Caspase.  
DR InterPro: IPR001309; ICE\_p20.  
DR InterPro: IPR003598; IG\_c2.  
DR InterPro: IPR003600; IG\_1like.  
DR InterPro: IPR003006; IG\_MHC.  
DR pfam: PF00047; IG\_2.  
DR pfam: PF00047; BIR\_3.  
DR SMART: SM00238; BIR\_3.  
DR SMART: SM00113; CASc\_1.  
DR SMART: SM00408; IGc2\_1.  
DR SMART: SM00410; IG\_1like\_1.  
DR PROSITE: PS01282; BIR\_REPEAT\_1\_3.  
DR PROSITE: PS0143; BIR\_REPEAT\_2\_3.  
DR PROSITE: PS0208; CASPASE\_P20; 1.

SO SEQUENCE 1140 AA; 128738 MW; 0C18D890287C723E CRC64;

Query Match 100.0%; Score 267; DB 4; Length 1140;  
Best Local Similarity 100.0%; Pred. No. 3.3e-26;  
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 LAKAGFYITGPGDRVACFACGKLSNMPEKDNAMSEHLRHPKCP 46  
DB 189 LAKAGFYITGPGDRVACFACGKLSNMPEKDNAMSEHLRHPKCP 234

## RESULT 2

ID Q90ZC6 PRELIMINARY; PRT; 589 AA.

AC Q90ZC6; 01-MAY-2000 (TREMBLrel. 13, Created)

DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)

DE INHIBITOR OF APOPTOSIS PROTEIN 2.

OS Rattus norvegicus (Rat).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

CC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.

OX NCBI\_TaxId=10116;

RA SEQUENCE FROM N.A.

RC 11550E-KIDNEY;

RA Dong Z., Denton M., Gu S.M., Salkumar P., Venkatachalam M.A.;

RT Cloning of cDNA for rat inhibitor of apoptosis protein 2.\*;

RL Submitted (SEP-1999) to the EMBL/GenBank/DBJ databases.

CC -1- SIMILARITY: CONTAINS A RING-TYPE ZINC FINGER.

DR EMBL: AF190020; AAF04585.1; -

DR HSSP: O13490; 108H.

DR InterPro: IPR001370; BIR.

DR InterPro: IPR001315; CARD.

DR InterPro: IPR001841; ZnF\_fing.

DR Pfam: PF00653; BIR; 3.

DR Pfam: PF00097; zf-C3HC4; 1.

DR SMART: SM00238; BIR; 3.

DR SMART: SM00114; CARD; 1.

DR SMART: SM00184; RING; 1.

DR PROSITE: PS01282; BIR\_REPEAT\_1; 3.

DR PROSITE: PS50143; BIR\_REPEAT\_2; 3.

DR PROSITE: PS50209; CARD; 1.

DR Zinc-finger.

KM SEQUENCE 589 AA; 66777 MW; E6812FEFE3EA34142 CRC64;

Query Match 86.9%; Score 232; DB 11; Length 589;

Best Local Similarity 84.8%; Pred. No. 5.9e-22;  
Matches 39; Conservative 2; Mismatches 5; Indels 0; Gaps 0;

OY 1 LAKAGFYITGPGDRVACFACGKLSNMPEKDNAMSEHLRHPKCP 46  
DB 176 LAKAGFYITGPGDRVACFACGKLSNMPEKDNAMSEHLRHPKCP 221

## RESULT 3

ID Q9ESB8 PRELIMINARY; PRT; 589 AA.

AC Q9ESB8; 01-MAR-2001 (TREMBLrel. 16, Created)

DT 01-MAR-2001 (TREMBLrel. 16, Last sequence update)

DE INHIBITOR OF APOPTOSIS PROTEIN 2.

OS Rattus norvegicus (Rat).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

CC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.

OX NCBI\_TaxId=10116;

RA SEQUENCE FROM N.A.

RC 11550E-KIDNEY;

RA Holcik M., Lefebvre C.A., Hicks K., Korneljuk R.G.;

RT "Cloning and Characterization of the Rat Homologs of the Inhibitor of

Apoptosis Protein 1, 2, and 3 Genes.\*;

RL Submitted (SEP-1999) to the EMBL/GenBank/DBJ databases.

CC -1- SIMILARITY: CONTAINS A RING-TYPE ZINC FINGER.

DR EMBL: AF183431; AAG22971.1; -

DR InterPro: IPR001370; BIR.

DR InterPro: IPR001315; CARD.

DR InterPro: IPR001841; ZnF\_fing.

DR Pfam: PF00653; BIR; 3.

DR Pfam: PF00619; CARD; 1.

DR Pfam: PF00097; zf-C3HC4; 1.

DR SMART: SM00238; BIR; 3.

DR SMART: SM00114; CARD; 1.

DR SMART: SM00184; RING; 1.

DR PROSITE: PS01282; BIR\_REPEAT\_1; 1.

DR PROSITE: PS50143; BIR\_REPEAT\_2; 3.

DR PROSITE: PS50209; CARD; 1.

DR Zinc-finger.

KM SEQUENCE 589 AA; 66750 MW; B4F7089BD7CD285B CRC64;

Query Match 86.9%; Score 232; DB 11; Length 589;

Best Local Similarity 84.8%; Pred. No. 5.9e-22;  
Matches 39; Conservative 2; Mismatches 5; Indels 0; Gaps 0;

OY 1 LAKAGFYITGPGDRVACFACGKLSNMPEKDNAMSEHLRHPKCP 46  
DB 176 LAKAGFYITGPGDRVACFACGKLSNMPEKDNAMSEHLRHPKCP 221

## RESULT 4

ID Q9ESB9 PRELIMINARY; PRT; 602 AA.

AC Q9ESB9; 01-MAR-2001 (TREMBLrel. 16, Created)

DT 01-MAR-2001 (TREMBLrel. 16, Last sequence update)

DE INHIBITOR OF APOPTOSIS PROTEIN 1.

OS Rattus norvegicus (Rat).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

CC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.

OX NCBI\_TaxId=10116;

RA SEQUENCE FROM N.A.

RA Holcik M., Lefebvre C.A., Hicks K., Korneljuk R.G.;

RT Cloning and Characterization of the Rat Homologs of the Inhibitor of

Apoptosis Protein 1, 2, and 3 Genes.\*;

RL Submitted (SEP-1999) to the EMBL/GenBank/DBJ databases.

CC -1- SIMILARITY: CONTAINS A RING-TYPE ZINC FINGER.

DR EMBL: AF183430; AAG22970.1; -

DR InterPro: IPR001370; BIR.

DR InterPro: IPR001315; CARD.

DR InterPro: IPR001841; ZnF\_fing.

DR Pfam: PF00653; BIR; 3.

DR Pfam: PF00619; CARD; 1.

DR Pfam: PF00097; zf-C3HC4; 1.

DR SMART: SM00238; BIR; 3.

DR SMART: SM00114; CARD; 1.

DR SMART: SM00184; RING; 1.

DR PROSITE: PS01282; BIR\_REPEAT\_1; 1.

DR PROSITE: PS50143; BIR\_REPEAT\_2; 3.

DR PROSITE: PS50209; CARD; 1.

DR Zinc-finger.

KM SEQUENCE 602 AA; 67326 MW; CC91385EBA62DE5A CRC64;

Query Match 84.6%; Score 226; DB 11; Length 602;

Best Local Similarity 82.6%; Pred. No. 3.6e-21;  
Matches 38; Conservative 3; Mismatches 5; Indels 0; Gaps 0;

OY 1 LAKAGFYITGPGDRVACFACGKLSNMPEKDNAMSEHLRHPKCP 46  
DB 189 LAKAGFYITGPGDRVACFACGKLSNMPEKDNAMSEHLRHPKCP 234

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RESULT 5
091A70 PRELIMINARY; PRT; 195 AA.
AC 091A70:
DT 01-OCT-2000 (TREMBLrel. 15, Created)
DT 01-OCT-2000 (TREMBLrel. 15, Last sequence update)
DT 01-JUN-2001 (TREMBLrel. 17, Last annotation update)
DE INHIBITOR OF APOPTOSIS 1 (FRAGMENT).
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN 11
RP SEQUENCE FROM N.A.
RC STRAIN-BRED LEHORN; TISSUE=SPLEEN;
RA Zhou H., Lamont S.J.;
RT "Genetic variation among chicken lines and mammalian species in
RT specific genes."
RL Submitted (JAN-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL: AF221082; AAF35319.1; -.
DR InterPro: IPR001370; BIR.
DR Pfam: PF00653; BIR; 2.
DR SMART: SM00238; BIR; 2.
DR PROSITE: PS01282; BIR_REPEAT_1; 2.
DR PROSITE: PS0143; BIR_REPEAT_2; 2.
FT NON_TER 1
FT 195
FT SEQUENCE 195 AA; 22347 MW; 9C39BFA755E24E48 CRC64;

Query Match 83.5%; Score 223; DB 13; Length 195;
Best Local Similarity 80.4%; Pred. No. 2,7e-21;
Matches 37; Conservative 3; Mismatches 6; Indels 0; Gaps 0;

QY 1 LAKAGFYIIGPDRVACFACGKLSNMEPKDNAMSEHLRHPKCP 46
Db 50 LAKAGLYLTGADKAVACFTCGGOLSNMEPKDNAMSEHLRHPKCP 95

RESULT 6
091A69 PRELIMINARY; PRT; 197 AA.
AC 091A69:
DT 01-OCT-2000 (TREMBLrel. 15, Created)
DT 01-OCT-2000 (TREMBLrel. 15, Last sequence update)
DT 01-JUN-2001 (TREMBLrel. 17, Last annotation update)
DE INHIBITOR OF APOPTOSIS 1 (FRAGMENT).
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN 11
RP SEQUENCE FROM N.A.
RC STRAIN-BRED FAYOUMI; TISSUE=SPLEEN;
RA Zhou H., Lamont S.J.;
RT "Genetic variation among chicken lines and mammalian species in
RT specific genes."
RL Submitted (JAN-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL: AF221083; AAF35320.1; -.
DR InterPro: IPR001370; BIR.
DR Pfam: PF00653; BIR; 2.
DR SMART: SM00238; BIR; 2.
DR PROSITE: PS01282; BIR_REPEAT_1; 2.
DR PROSITE: PS0143; BIR_REPEAT_2; 2.
FT NON_TER 1
FT 197
FT SEQUENCE 197 AA; 22602 MW; D7923DABC623E1A CRC64;

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Query Match 83.5%; Score 223; DB 13; Length 197;
Best Local Similarity 80.4%; Pred. No. 2,7e-21;
Matches 37; Conservative 3; Mismatches 6; Indels 0; Gaps 0;

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QY 1 LAKAGFYIIGPDRVACFACGKLSNMEPKDNAMSEHLRHPKCP 46
Db 51 LAKAGLYLTGADKAVACFTCGGOLSNMEPKDNAMSEHLRHPKCP 96

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RESULT 7
09DND2 PRELIMINARY; PRT; 324 AA.
ID 09DND2:
AC 09DND2:
DT 01-MAR-2001 (TREMBLrel. 16, Created)
DT 01-MAR-2001 (TREMBLrel. 16, Last sequence update)
DT 01-JUN-2001 (TREMBLrel. 17, Last annotation update)
DE APOPTOSIS INHIBITOR CH-1A1 (FRAGMENT).
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN 11
RP SEQUENCE FROM N.A.
RA Pendleton C.N., Bargmann W.J., Varadarajan J., Bose H.R. Jr.;
RT "The apoptosis inhibitor ch-1A1 is a direct transcriptional target of
RT v-Rel and c-Rel."
RL Submitted (OCT-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL: AF311289; AAG42316.1; -.
DR InterPro: IPR001370; BIR.
DR Pfam: PF00653; BIR; 3.
DR SMART: SM00238; BIR; 3.
DR PROSITE: PS01282; BIR_REPEAT_1; 1.
DR PROSITE: PS0143; BIR_REPEAT_2; 3.
FT NON_TER 324
FT 324
FT SEQUENCE 324 AA; 36567 MW; 5E2B89DEAE3733F3 CRC64;

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Query Match 83.5%; Score 223; DB 13; Length 324;
Best Local Similarity 80.4%; Pred. No. 4,6e-21;
Matches 37; Conservative 3; Mismatches 6; Indels 0; Gaps 0;

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QY 1 LAKAGFYIIGPDRVACFACGKLSNMEPKDNAMSEHLRHPKCP 46
Db 196 LAKAGLYLTGADKAVACFTCGGOLSNMEPKDNAMSEHLRHPKCP 241

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RESULT 8
057319 PRELIMINARY; PRT; 610 AA.
ID 057319:
AC 057319:
DT 01-JUN-1998 (TREMBLrel. 06, Created)
DT 01-JUN-1998 (TREMBLrel. 06, Last sequence update)
DT 01-JUN-2001 (TREMBLrel. 17, Last annotation update)
DE INHIBITOR OF APOPTOSIS PROTEIN 1 (IAP) (INHIBITOR OF T CELL APOPTOSIS
DE PROPEIN).
GN IAP1.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN 11
RP SEQUENCE FROM N.A.
RC STRAIN-WHITE LEHORN; TISSUE=EMBRYONIC FIBROBLAST;
RX MEDLINE=98036801; PubMed=9372964;
RA You M., Ku P.-T., Hrdlickova R., Bose H.R. Jr.;
RT "Ch-IAP1, a member of the inhibitor-of-apoptosis protein family, is a
RT mediator of the antiapoptotic activity of the v-Rel oncoprotein."
RL Mol. Cell. Biol. 17:7328-7341(1997)
CC FUNCTION: SUPPRESSOR OF APOPTOSIS IN ONCOPROTEIN V-REL-TRANSFORMED
CC CELLS.
CC -1- SUBCELLULAR LOCATION: EXPRESSED PREDOMINANTLY IN THE CYTOPLASM OF

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THE V-REL-TRANSFORMED CELLS.  
 CC -1- TISSUE SPECIFICITY: EXPRESSED AT RELATIVELY HIGH LEVELS IN THE  
 CC SPLEEN, THYMUS, BURSAS, INTESTINE, AND LUNG, AND AT VERY LOW LEVELS  
 CC IN TESTIS, BRAIN, AND SKELETAL MUSCLE.  
 CC -1- INDUCTION: INDUCED DURING THE V-REL-MEDIATED TRANSFORMATION  
 CC PROCESS.  
 CC -1- DOMAIN: THE RING FINGER IS IMPORTANT FOR ITS ANTIAPOPTOTIC EFFECT.  
 CC -1- SIMILARITY: MEMBER OF THE IAP FAMILY  
 CC -1- SIMILARITY: CONTAINS 3 BIR DOMAINS (BACULOVIRAL INHIBITION OF  
 CC APOPTOSIS PROTEIN REPEAT)  
 CC -1- SIMILARITY: CONTAINS A C3HC4-CLASS ZINC FINGER.  
 CC EMBL: AF008592; AA88044.1; -.  
 DR HSSP: Q13490; 108H.  
 DR InterPro: IPR001370; BIR.  
 DR InterPro: IPR001315; CARD.  
 DR InterPro: IPR001841; Znf\_fing.  
 DR Pfam: PF00653; BIR; 3.  
 DR Pfam: PF00619; CARD; 1.  
 DR Pfam: PF00097; zf-C3HC4; 1.  
 DR SMART: SM00238; BIR; 3.  
 DR SMART: SM00114; CARD; 1.  
 DR SMART: SM00184; RING; 1.  
 DR PROSITE: PS01282; BIR\_REPEAT\_1; 3.  
 DR PROSITE: PS50143; BIR\_REPEAT\_2; 3.  
 DR PROSITE: PS30209; CARD; 1.  
 DR Apoptosis: Zinc-finger; Repeat.  
 KW REPEAT: 30 97 BIR\_REPEAT\_1.  
 FT REPEAT 176 242 BIR\_REPEAT\_2.  
 FT REPEAT 262 329 BIR\_REPEAT\_3.  
 FT ZN\_FING 563 597 C3HC4-TYPE.  
 SQ SEQUENCE 610 AA: 68924 MW: 46761965084446 CRC64:

Query Match 83.5%; Score 223; DB 13; Length 610;  
 Best Local Similarity 80.4%; Pred. No. 9e-21;  
 Matches 37; Conservative 3; Mismatches 6; Indels 0; Gaps 0;  
 QY 1 LAKAGFYTGPDRAVACFCAGKLSNMEPKNAMSEHRRHPKCP 46  
 DB 196 LAKAGLYTGTADVACFTGGGLSNMEPKNAMSEHRRHPKCP 241

RESULT 9  
 ID 08642 PRELIMINARY; PRT; 224 AA.  
 AC 08642;  
 DT 01-NOV-1998 (TREMBLrel. 08, Created)  
 DT 01-NOV-1998 (TREMBLrel. 08, Last sequence update)  
 DT 01-JUN-2001 (TREMBLrel. 17, Last annotation update)  
 DE INHIBITOR OF APOPTOSIS PROTEIN (FRAGMENT).  
 GN RIAP1.  
 OS Rattus norvegicus (Rat).  
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 CC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.  
 OX NCBI\_TaxID=10116;  
 RN 11  
 RP SEQUENCE FROM N.A.  
 RC STRAIN=MISTAR; TISSUE=OVARY; CORPUS LUTEUM;  
 RA Bradley C.K., Laren R.R., Dharmarajan A.M.;  
 RT "Cloning and characterization of an inhibitor of apoptosis protein  
 RT (IAP) in the rat corpus luteum."  
 RT Submitted (Aug-1998) to the EMBL/GenBank/DBJ databases.  
 DR EMBL: AF081503; AAC32497.1; -.  
 DR HSSP: Q13490; 108H.  
 DR InterPro: IPR001370; BIR.  
 DR Pfam: PF00653; BIR; 2.  
 DR SMART: SM00238; BIR; 2.  
 DR PROSITE: PS50143; BIR\_REPEAT\_2; 3.  
 FT NON\_TER 1  
 FT NON\_TER 224 224  
 SQ SEQUENCE 224 AA: 25209 MW: 213525345856A CRC64:

Query Match 81.3%; Score 217; DB 11; Length 224;  
 Best Local Similarity 78.3%; Pred. No. 1.9e-20;  
 Matches 36; Conservative 2; Mismatches 8; Indels 0; Gaps 0;  
 QY 1 LAKAGFYTGPDRAVACFCAGKLSNMEPKNAMSEHRRHPKCP 46  
 DB 105 LKGAIFYTGPDRAVACFCAGKLSNMEPKNAMSEHRRHPKCP 150

RESULT 10  
 ID 09E00 PRELIMINARY; PRT; 496 AA.  
 AC 09E00;  
 DT 01-MAR-2001 (TREMBLrel. 16, Created)  
 DT 01-MAR-2001 (TREMBLrel. 16, Last sequence update)  
 DT 01-JUN-2001 (TREMBLrel. 17, Last annotation update)  
 DE INHIBITOR OF APOPTOSIS PROTEIN 3.  
 OS Rattus norvegicus (Rat).  
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 CC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.  
 OX NCBI\_TaxID=10116;  
 RN 11  
 RP SEQUENCE FROM N.A.  
 RA Holcik M., Lefebvre C.A., Hicks K., Korneluk R.G.;  
 RT "Cloning and Characterization of the Rat Homologs of the Inhibitor of  
 RT Apoptosis Protein 1, 2, and 3 Genes."  
 RL Submitted (SEP-1999) to the EMBL/GenBank/DBJ databases.  
 CC EMBL: AF183429; AAC22969.1; -.  
 DR InterPro: IPR001370; BIR.  
 DR InterPro: IPR001841; Znf\_fing.  
 DR Pfam: PF00653; BIR; 3.  
 DR Pfam: PF00097; zf-C3HC4; 1.  
 DR SMART: SM00238; BIR; 3.  
 DR SMART: SM00184; RING; 1.  
 DR PROSITE: PS01282; BIR\_REPEAT\_1; 1.  
 DR PROSITE: PS50143; BIR\_REPEAT\_2; 3.  
 KW Zinc-finger.  
 SQ SEQUENCE 496 AA: 56117 MW: 98F124AEC5E798 CRC64;

Query Match 65.5%; Score 175; DB 11; Length 496;  
 Best Local Similarity 67.4%; Pred. No. 1.2e-14;  
 Matches 31; Conservative 1; Mismatches 14; Indels 0; Gaps 0;  
 QY 1 LAKAGFYTGPDRAVACFCAGKLSNMEPKNAMSEHRRHPKCP 46  
 DB 184 LAKAGLYTGTADVACFTGGGLSNMEPKNAMSEHRRHPKCP 229

RESULT 11  
 ID 09E00 PRELIMINARY; PRT; 501 AA.  
 AC 09E00;  
 DT 01-MAR-2001 (TREMBLrel. 16, Created)  
 DT 01-MAR-2001 (TREMBLrel. 16, Last sequence update)  
 DT 01-JUN-2001 (TREMBLrel. 17, Last annotation update)  
 DE INHIBITOR OF APOPTOSIS PROTEIN 3.  
 OS Rattus norvegicus (Rat).  
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 CC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.  
 OX NCBI\_TaxID=10116;  
 RN 11  
 RP SEQUENCE FROM N.A.  
 RC STRAIN=MISTAR; TISSUE=OVARY;  
 RA Laren R.R., Bradley C.K., Lacher M., Ellis R.R., Dharmarajan A.M.;  
 RT "Cloning, characterization and regulation of an inhibitor of apoptosis  
 RT protein in the rat corpus luteum."  
 RT Submitted (SEP-2000) to the EMBL/GenBank/DBJ databases.  
 RL -1- SIMILARITY: CONTAINS A RING-TYPE ZINC FINGER.  
 DR EMBL: AF304333; AAC41192.1; -.  
 DR InterPro: IPR001370; BIR.  
 DR InterPro: IPR001841; Znf\_fing.

DR Pfam: PF00653; BIR; 3.  
 DR SMART: PF00097; zf-C3HC4; 1.  
 DR SMART: SM00238; BIR; 3.  
 DR SMART: SM00184; RING; 1.  
 DR PROSITE: PS01282; BIR\_REPEAT\_1; 1.  
 DR PROSITE: PS50143; BIR\_REPEAT\_2; 3.  
 DR Zinc-finger.  
 KW SEQUENCE 501 AA; 56548 MW; 0973BF28B81C5A0 CRC64;

Query Match 65.5%; Score 175; DB 11; Length 501;  
 Best Local Similarity 67.4%; Pred. No. 1.3e-14;  
 Matches 31; Conservative 1; Mismatches 14; Indels 0; Gaps 0;

OY 1 LANAGFYIIGPDRVACFACGKLSNWEPRKDNAMSEHLRHPKCP 46  
 DB 184 LASAGLYTGIDDOVCCGCKLKMEPCDRAWSEHRRHPKCF 229

RESULT 12  
 OY9E004 PRELIMINARY; PRT; 501 AA.  
 AC OY9E004;  
 DT 01-MAR-2001 (TREMBLrel. 16, Created)  
 DT 01-MAR-2001 (TREMBLrel. 16, last sequence update)  
 DT 01-JUN-2001 (TREMBLrel. 17, last annotation update)  
 DE INHIBITOR OF APOPTOSIS PROTEIN 3.  
 OS Rattus norvegicus (Rat).  
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 CC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.  
 NCBI\_TaxID=10116;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC STRAIN=HISAR; TISSUE=OVARY;  
 RA Irenu R.R., Bradley C.K., Lacher M., Ellis R.R., Dharmarajan A.M.;  
 RT Cloning, characterization and regulation of an inhibitor of apoptosis  
 RT protein in the rat corpus luteum 3;  
 RL Submitted (SEP-2000) to the EMBL/Genbank/DBJ databases.  
 CC 1- SIMILARITY: CONTAINS A RING-TYPE ZINC FINGER.  
 DR EMBL: AF304336; A041193.1; -;  
 DR Interpro: IPR001370; BIR.  
 DR Interpro: IPR001841; ZnF\_fing.  
 DR Pfam: PF0653; BIR; 3.  
 DR Pfam: PF00097; zf-C3HC4; 1.  
 DR SMART: SM00238; BIR; 3.  
 DR SMART: SM00184; RING; 1.  
 DR PROSITE: PS01282; BIR\_REPEAT\_1; 1.  
 DR PROSITE: PS50143; BIR\_REPEAT\_2; 3.  
 DR Zinc-finger.  
 KW SEQUENCE 501 AA; 56578 MW; 4863F69FF2E0C8CD CRC64;

Query Match 65.5%; Score 175; DB 11; Length 501;  
 Best Local Similarity 67.4%; Pred. No. 1.3e-14;  
 Matches 31; Conservative 1; Mismatches 14; Indels 0; Gaps 0;

OY 1 LANAGFYIIGPDRVACFACGKLSNWEPRKDNAMSEHLRHPKCP 46  
 DB 184 LASAGLYTGIDDOVCCGCKLKMEPCDRAWSEHRRHPKCF 229

RESULT 13  
 OY9E015 PRELIMINARY; PRT; 597 AA.  
 AC OY9E015;  
 DT 01-MAY-2000 (TREMBLrel. 13, Created)  
 DT 01-MAY-2000 (TREMBLrel. 13, last sequence update)  
 DT 01-JUN-2001 (TREMBLrel. 17, last annotation update)  
 DE NEURONAL APOPTOSIS INHIBITORY PROTEIN.  
 CC BIRCLE OR NAIP.  
 OS Mus musculus (mouse).  
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 CC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

OX NCBI\_TaxID=10090;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC MEDLINE-94431676; PubMed-10501978;  
 RA Huang S., Scharf J.M., Growney J.D., Endrizzi M.G., Dietrich W.F.;  
 RT "The mouse Naip gene cluster on Chromosome 13 encodes several distinct  
 RT functional transcripts."  
 RL Mamm. Genome 10:1032-1035(1999).  
 DR EMBL: AF135493; A056765.1; -;  
 DR HSP: Q13490; 10BH.  
 DR MED: MG1:1298220; Bircle.  
 DR Interpro: IPR001370; BIR.  
 DR Pfam: PF00653; BIR; 3.  
 DR SMART: SM00238; BIR; 3.  
 DR PROSITE: PS01282; BIR\_REPEAT\_1; UNKNOWN.2.  
 DR PROSITE: PS50143; BIR\_REPEAT\_2; 3.  
 DR Zinc-finger.  
 KW SEQUENCE 597 AA; 68322 MW; 4042E3651A7F9A0 CRC64;

Query Match 52.8%; Score 141; DB 11; Length 597;  
 Best Local Similarity 52.2%; Pred. No. 3.9e-10;  
 Matches 24; Conservative 5; Mismatches 17; Indels 0; Gaps 0;

OY 1 LANAGFYIIGPDRVACFACGKLSNWEPRKDNAMSEHLRHPKCP 46  
 DB 135 LSAGFVFTGKRDVQCFSCGSLGNWEGDDPWKEHAKWPKCF 180

RESULT 14  
 OY9E02 PRELIMINARY; PRT; 153 AA.  
 AC OY9E02;  
 DT 01-MAY-2000 (TREMBLrel. 13, Created)  
 DT 01-MAY-2000 (TREMBLrel. 13, last sequence update)  
 DT 01-JUN-2001 (TREMBLrel. 17, last annotation update)  
 DE CG12265 PROTEIN.  
 GN CG12265  
 OS Drosophila melanogaster (Fruit fly).  
 CC Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;  
 CC Ephyridia; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;  
 CC Ephyrididae; Drosophilidae; Drosophila.  
 NCBI\_TaxID=7227;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC STRAIN=BERKELEY;  
 RA MEDLINE-20196006; PubMed-10731132;  
 RA Adams W.D., Celnikier S.E., Holt R.A., Evans C.A., Gocayne J.D.,  
 RA Adams M.D., Celnikier S.E., Li P.W., Hoskins R.A., Galle R.F.,  
 RA Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F.,  
 RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,  
 RA Sutton G.G., Mortman J.R., Yandell M.D., Zhang Q., Chen L.X.,  
 RA Burton R.C., Rogers Y.-H.C., Blazek R.G., Champe M., Pfeiffer B.D.,  
 RA Wan K.H., Doyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G.,  
 RA Abril J.F., Adbeyani A., An H.-J., Andrews-Pinnock C., Baldwin D.,  
 RA Ballew R.M., Basu A., Bakendale J., Bayraktaroglu L., Beasley E.M.,  
 RA Besson K.Y., Benos P.V., Berman B.P., Bhattacharya D., Boshakov S.,  
 RA Burkova D., Botchan M.R., Bouck J., Brokstein P., Brothier P.,  
 RA Butlis K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.,  
 RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,  
 RA de Pablo B., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M.,  
 RA Dodson K.J., Evangelista C.C., Ferraz C., Ferreira S., Fleischmann W.,  
 RA Durbin K.J., Evangelista C.C., Ferraz C., Ferreira S., Fleischmann W.,  
 RA Foster C., Gabriellian A.E., Garg N.S., Galbart W.M., Glaeser K.,  
 RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,  
 RA Harris N.L., Harvey D., Helman T.J., Hernandez J.R., Houck J.,  
 RA Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibegwan C.,  
 RA Jaisi M., Kalish F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A.,  
 RA Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,  
 RA Lasko P., Lei Y., Levitsky A.A., Li J., Li Z., Liang Y., Lin X.,  
 RA Liu X., Mattei B., McIntosh T.C., McLeod M.P., McPherson D.,  
 RA Merkulov G., Milshina N.V., Mobarry C., Morris J., Mostrelli A.,  
 RA Mount S.M., Moy M., Murphy B., Murphy L., Muzny D.M., Nelson D.L.,  
 RA Nelson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacle J.M.,  
 RA Palazolo M., Pittman G.S., Pan S., Pollard J., Puri V., Reese M.G.,



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